**MODEL ER-A770****Debitek Cash Card Installation Guide****Contents**

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NOTICE TO USERS

This manual is intended to assist authorized Sharp dealers, with learning and understanding how to install and provide support in the utilization of the ER-A770 credit card authorization interface utilizing Debitel's card reader products. This assumes that you are familiar with the general programming concepts of the ER-A770. Please read this introductory section carefully as it will provide helpful hints and recommendations that will make your time more efficient and produce time saving results. This manual is not intended for end user customers of authorized Sharp dealers. Debitel is solely responsible for the card reader product and its documentation. Any information in this manual is subject to any instructions or information in Datacap's documentation.

OVERVIEW

The ER-A770 model POS terminals provide an interface for supporting the Debitek Card Reader unit. The primary configuration depicts that every POS terminal within the system will be connected to a card reader.

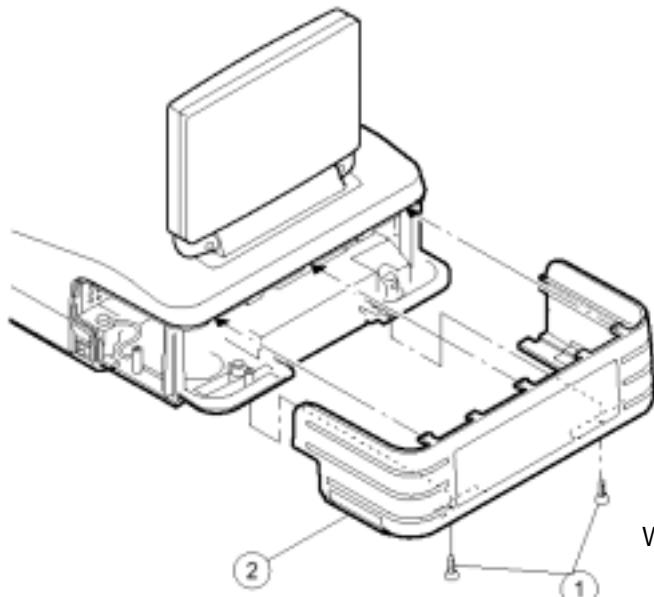
1. Types of Configurations:
 - 1) Standalone
 - 2) In Line
2. Key functions provided by the ER-A770:
 - 1) Full payment
 - 2) Partial payment
 - 3) Cash Card Ejection

EQUIPMENT CONNECTION

1. The ER-A770 Cash Card Connection:

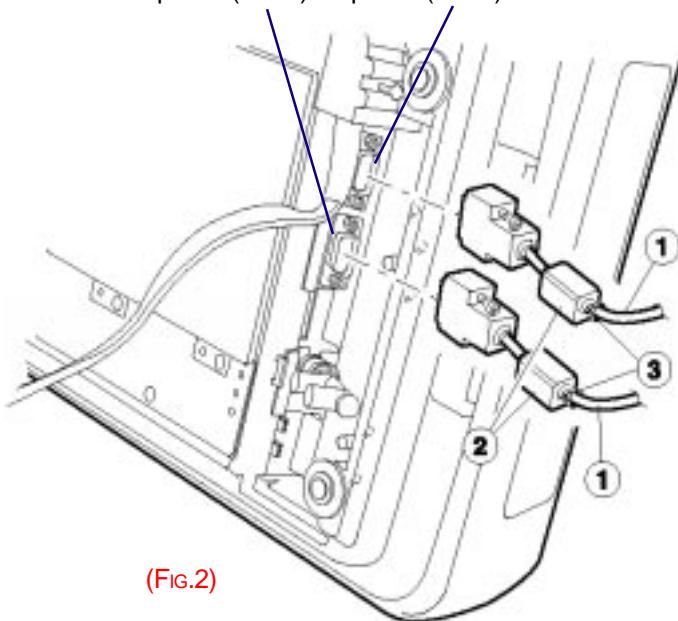
The ER-A770 provides two RS-232 communication ports standard with the possibility of adding the ER-A7RS optional RS-232 expansion board to increase the number of RS-232 ports to four maximum. The instructions provided within will be based on the standard configuration.

Connection for the Cash Card Reader may be attached to the ER-A770 as shown below in (Fig. 1 and Fig. 2):



(Fig.1)

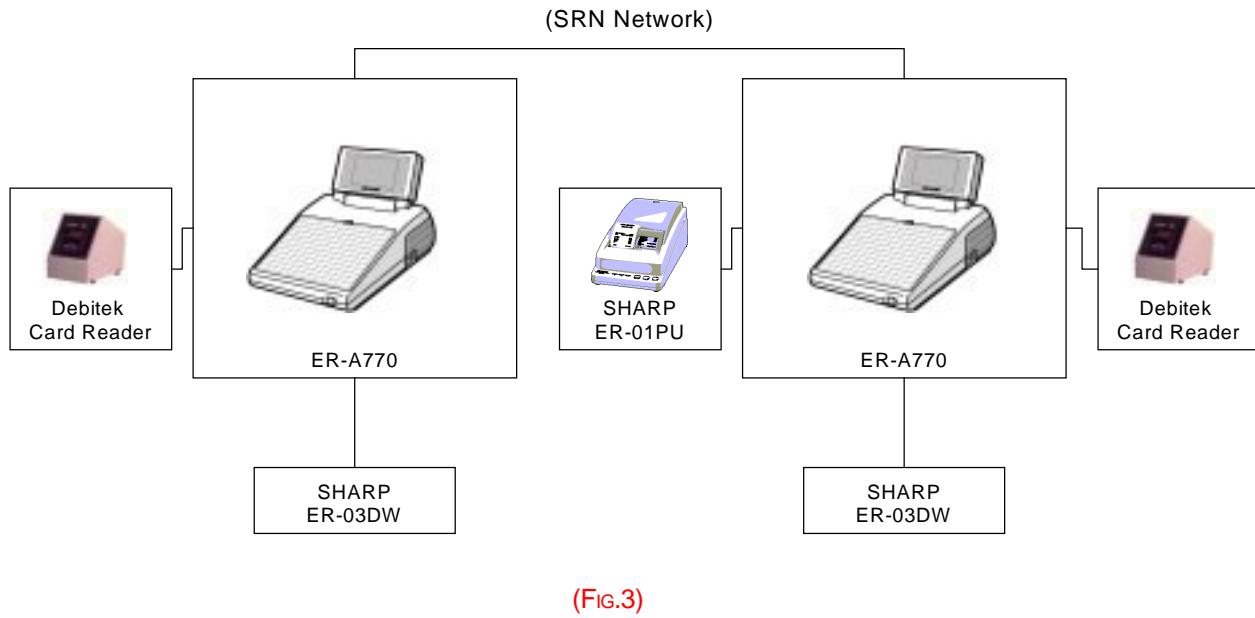
When using the CAT/EFT function, the connection for the cable may be port-1 (CH-1) or port-2 (CH-2)



(Fig.2)

Note:

The extension cable for connection is provided with the Card Reader. For the specific pin outs, please call Debitek Customer Service.

2. System Configuration:**1) Block Diagram:****2) Equipment List:**

EQUIPMENT LIST			
Provider	Standalone Config.	Model/Part No.	Qty
SHARP	POS terminal	ER-A770	1
	Cash Drawer	ER-03DW	1
	Memory Option * as required	UP-P02MB2 * as required	--
	2 Sta. Thermal Printer	ER-01PU	1
Local Procurement	Debitek Card Reader	KDCT-CR-SHARPER * Connection cables are included	1

Note: For InLine configurations as shown in (Fig. 3), each POS terminal will have a Cash Card Reader connected.

3) Debitek Accessory Items:

<u>Debitek Order Number</u>	<u>Description</u>
KHAR-DCT-PC-9	- (9 to 25) SHARP-to-Debitek connection cable
DOC-201001	- Set up document for the card reader
KDCS-3-64	- Data Collector/Programming device ***
KCRD-PCC-CT	- Cleaning cards
KAYS-CT3-E	- Spare Card Reader mechanism

*** Dealers who are placing their order for the very 1st time will not have this device. The Data Collector/Programming device is essential for setting up the Debitek Card Reader System.

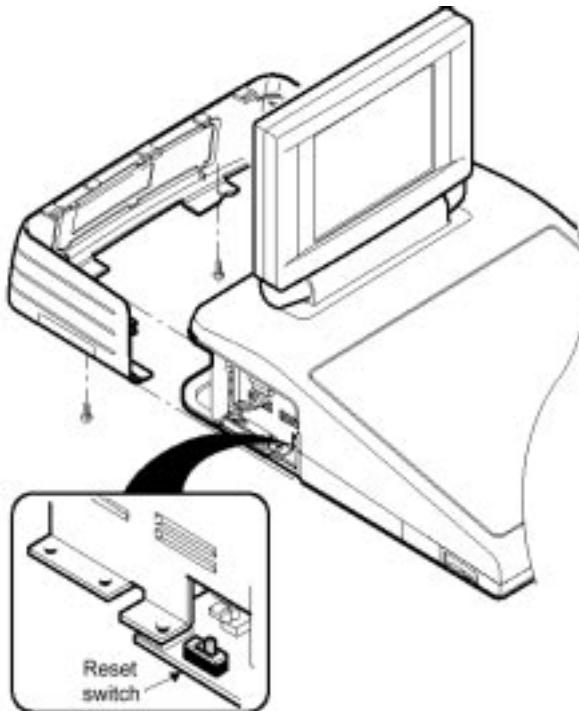
For further assistance, please contact your Debitek representative or contact Debitek directly by calling:

(423) 894 - 6177

RESET PROCEDURES**1. Program (SRV) Reset:**

To perform a Program Reset, the Reset switch located beneath the back cover panel must be used. Please refer to (fig. 4) when performing the below key sequence.

- (1) Turn the AC power "OFF" using the power switch on the RH-side of the ER-A770.
- (2) Place the Reset Switch to the "ON" position (towards the rear).
- (3) Turn the AC power to the "ON" position.
(Please note that the display goes out)
- (4) Count for 5 seconds.
- (5) Place the Reset Switch to the "OFF" position (towards the front)
(Please note that the display becomes lit.)



(Fig.4)

Failure to adhere to one of the above procedures when instructed to do so may result in corrupt
or broken RAM addressing

PROGRAMMING PRINCIPLES

1. Introduction:

The ER-A770 POS terminal may be interfaced with peripheral devices such as card readers as a method of sales transaction finalization. The different types of function and media keys to be included for the system setup are recommended below.

Please review this section carefully as it provides the recommended settings for the different methods for finalization sales transactions.

2. Programming Principles:

The ER-A770 incorporates the use of a programming keyboard sheet which is fixed while in SRV and PGM2 modes. While in these modes, there are certain keys that are used to make programming the ER-A770 easier to accomplish.

Please review the below list of function keys available while programming;

<u>FUNCTION</u>	<u>DESCRIPTION</u>
	
	The UP, DOWN, LEFT and RIGHT arrow keys are used to navigate within the specified menu and/ or preset entry field.
	
	
	Used to scroll the programming window back to the previous page.
	Used to scroll the programming window to the next page.
	Used to "toggle" between fixed selections within a preset entry field when it is applicable.
	Used to "list" available fixed selections within a preset entry field when it is applicable.
	Used to "set" each preset entry field.
	Used to "finalize" each preset entry field.
	Used to clear the last setting you have programmed or clear an error state.
	Used to "cancel" programming and to return to the previous screen.

RECOMMENDED SEQUENCE FOR PROGRAMMING**1. Prior to Programming:**

- 1) Always install the necessary options (i.e. Optional RAM, etc.) prior to programming.
- 2) Insure that the ER-A770 is installed with the proper ROM version using the chart below:

Model	ROM#	Description	Date	Label
ER-A770	ROM #1	770_1.ROM	05/2000	RAJ1A
	ROM #2	770_2.ROM		RAK1A
	ROM #1	770_1B.ROM	06/2001	RAJ1B
	ROM #2	770_2B.ROM		RAK1B

Note: The Debitek Cash Card will work with either version ROM object.

- 3) Start your programming sessions by executing one of the Master Reset operations.
(for detailed information about the Master Reset operations, please refer to the applicable Service Manual)

2. Recommended Sequence for programming:

Please complete the SRV-mode and PGM-mode sections in the order outlined below:

- 1) Always back up your existing program with the 02FD.EXE Utility prior to adding the programming for the Cash Card Reader.
- 2) Set the Device Configuration:
 - (a) CAT#2 or
 - (b) CAT#3
- 3) Set any applicable System Presets (SRV job #900 series).
- 4) Place the necessary Function keys on the keyboard (SRV job#950 Free Key).
- 5) Allocate any Memory Files (SRV job#970 series).
- 6) Perform a Program Reset (SRV Reset).
- 7) Set related presets in PGM2 mode.
 - (a) CAT Settings
 - (b) Media Key presets
 - (c) AUTO key programming
- 8) Remove unwanted function keys leaving the [AUTO] keys in place.
- 9) Conduct a Test with each of the finalization keys.
 - (a) Debit
 - (b) Partial Debit
 - (c) Eject Card

PROGRAM LIST

1. SRV Mode Related Jobs:

The below table represents the SRV mode jobs related to the Cash Card interface.

SRV Mode Related Jobs			
1. Device Assign			
	CAT#2	Channel No. settings	
	CAT#3	Channel No. settings	
2. JOB#900 System Presets			
Job#	Bit	Description	Data
906	A	Printing of Dept./PLU Codes Yes/No	4/0
		Entry which makes the PLU Stock Counter go Negative Inhibit/Allow with Error Indication/Allow unconditionally	2/1/0
916	B	Finalization by Charge Media when SBTL is <= 0 Yes/No	4/0
		----	---
		----	---
3. JOB#950 Free Key			
Func.#	Description		
084	Auto key		
085	Auto2 key		
086	Auto3 key		
114	Charge1 key		
115	Charge2 key		
117	Charge4 key		

2. PGM2 Mode Related Jobs:

The below table represents the PGM2 mode jobs related to the Cash Card interface.

PGM2 Mode Related Jobs			
1. CAT Setting			
Job#		Description	MRS Default
CAT PRESET #2	Preset	Time Out1	010
		Time Out2	099
		Baud Rate	9600bps
		Product Code	00000000
2. Media Settings			
Job#		Description	Data
Charge	CH1	for full Debit	<i>see details for selected parameters</i>
	CH2	for partial Debit	<i>see details for selected parameters</i>
	CH4	for Card Ejection	<i>see details for selected parameters</i>

SRV MODE PROGRAMMING

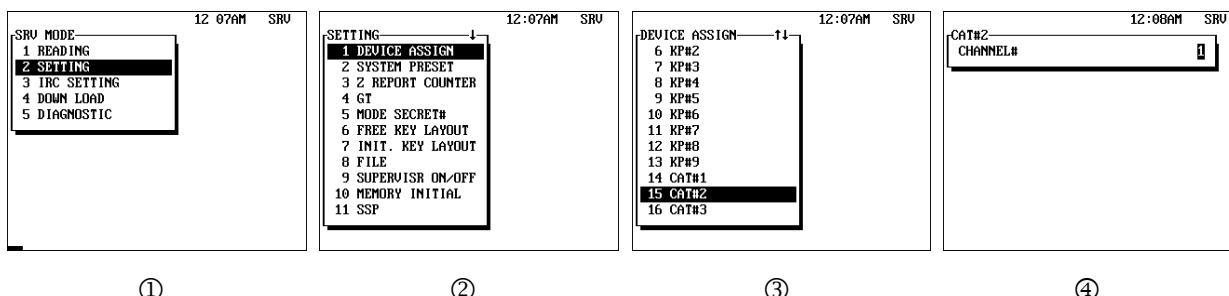
1. Device Configuration - CAT#2:

Place the ER-A770 into SRV mode:

- 1) Select 2 SETTING
- 2) Select 1 DEVICE ASSIGN
- 3) Select 15 CAT#2
- 4) Set the Channel No. followed by depressing the [ENTER] key.

*Note: the RS-232 port which the Debitek Card Reader is physically connected (Refer to pg. 2).
*** for this example CH#1 is used.*

- 5) Depress [CANCEL] to exit to the SRV SETTING Sub-Menu.
- 6) Depress [CANCEL] again to exit to the SRV MODE Sub-Menu.
- 7) Depress [MODE] to exit to the REG MODE.



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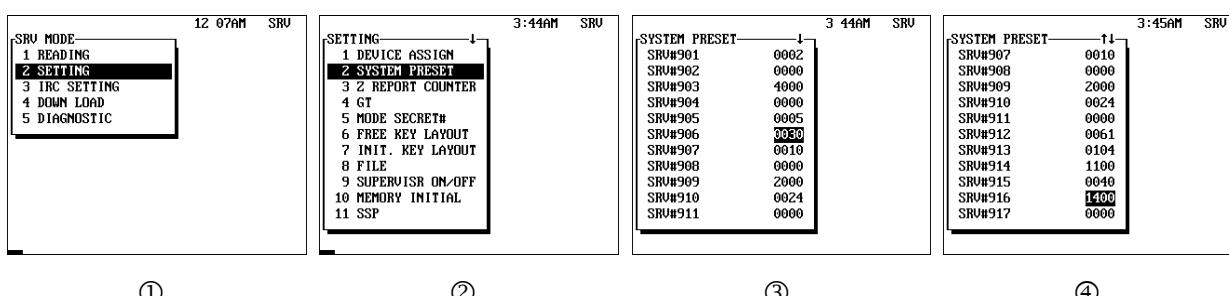
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2. SRV Mode System Presets:

Place the ER-A770 into SRV mode;

- 1) Select 2 SETTING
- 2) Select 2 SYSTEM PRESET
- 3) Set the following values;

- a) Job#906: = 0xxx
- b) Job#916: = x4xx



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3. Free Key Layout:

The Function keys required and the description for recommended usage are shown below:

<u>FUNCTION</u>	<u>DESCRIPTION</u>
	The AUTO key is preset for the Debit settlement key using CH1.
	The AUTO2 key is preset for the Partial Debit settlement key using CH2.
	The AUTO3 key is preset for the Card Ejection function using CH4.
	The CH1 key will be programmed for full Debit settlement which initiates the Card Reader.
	The CH2 key will be programmed for partial Debit settlement enforcing an amount entry which initiates the Card Reader.
	The CH4 key will be programmed to initiate the Card Reader to "EJECT" the card once depressed.
	The RFND key will be used when an error in entry has been made and will allow the amount to be restored onto the Cash Card.

Note: It is highly recommended that you place the usage of the REFUND key under Manager's control. For further details on how to incorporate Manager's control, please refer to the applicable Instruction Manual for Manager code and Optional presetting.

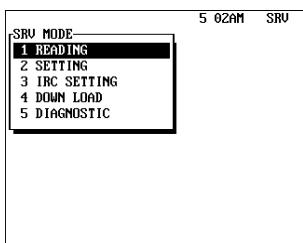
Note: It is important to note that "ONLY" the specified Charge media keys may be used.

SRV MODE PROGRAMMING READOUT**1. System Presets:**

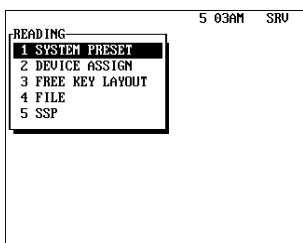
To obtain the System preset reading, please follow the below key sequence:

Place the SRV key in the SRV mode:

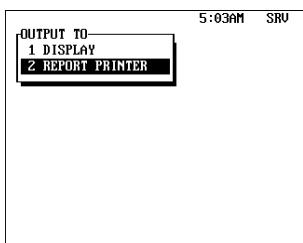
- 1) Select 1 READING
- 2) Select 1 SYSTEM PRESETS
- 3) Select 2 REPORT PRINTER
- 4) Once the report is printed, verify your settings.



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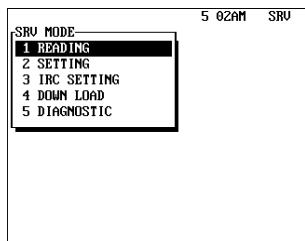
YOUR RECEIPT	
THANK YOU	
10/01/2001 000001	
#0133 7:45 PM	
SYSTEM PRESETS	
901#	0002
902#	0000
903#	4000
904#	0000
905#	0005
906#	0030
907#	0010
908#	0000
909#	2000
910#	0024
911#	0000
912#	0061
913#	0104
914#	1100
915#	0040
916#	1400
917#	0000
918#	2233
919#	5100
920#	2040
921#	0004
922#	0000
923#	0010
924#	1433
925#	0303
926#	0000
927#	0000
928#	0060
929#	0000
980#	0000
981#	4000
Z REPORT COUNTER	0000
TRANSACTION Z1	0000
TRANSACTION Z2	0000
POSITIVE GT	\$000000000000.00
G T 2	
NEGATIVE GT	\$000000000000.00
G T 3	
TRAINING GT	\$000000000000.00
TR	
AUTO KEY PGM	0000
REG MODE	0000
START UP	0000

2. Device Configuration:

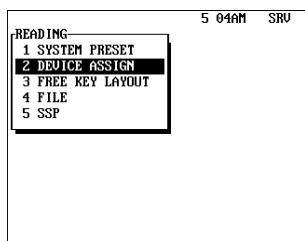
To obtain the Device Assignment preset reading, please follow the below key sequence:

Place the SRV key in the SRV mode:

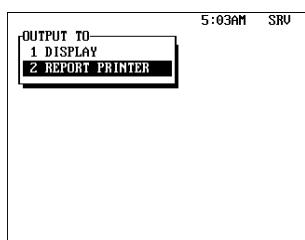
- 1) Select 1 READING
- 2) Select 2 DEVICE ASSIGN
- 3) Select 2 REPORT PRINTER
- 4) Once the report is printed, verify your settings.



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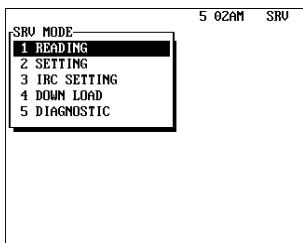
YOUR RECEIPT	
THANK YOU	
1 0 / 0 1 / 2 0 0 1	000001
# 0 1 3 4	7 : 4 6 P M
DEVICE CONFIG	
JPRINTER	---
R PRINTER	---
BILL PRINTER	---
REPORT PRINTER	T#000-C#2 YES EPSON TM-U200 ONE SHEET
KP#1	---
KP#2	---
KP#3	---
KP#4	---
KP#5	---
KP#6	---
KP#7	---
KP#8	---
KP#9	---
CAT#1	---
CAT#2	C#1
CAT#3	---
SCALE	---
COIN DISP.	---
ONLINE	---
CVM DATA I/F	---

3. Free Key Layout:

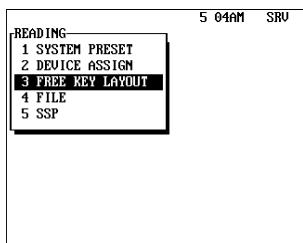
To obtain the Free Key Layout preset reading, please follow the below key sequence:

Place the SRV key in the SRV mode:

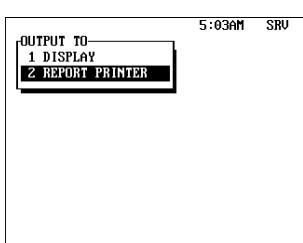
- 1) Select 1 READING
- 2) Select 6 FREE KEY LAYOUT
- 3) Select 2 REPORT PRINTER
- 4) Once the report is printed, verify your settings.



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YOUR RECEIPT		
THANK YOU		
10/01/2001	000001	
#0135	7:47 PM	
FREE KEY LAYOUT		
001	0	KEY
002	1	KEY
003	2	KEY
004	3	KEY
005	4	KEY
006	5	KEY
007	6	KEY
008	7	KEY
009	8	KEY
010	9	KEY
011	00	KEY
012	000	KEY
013	.	KEY
014	CL	
015	@/FOR	
...
060	I.VOID	114
061	ST VD	126
062	RFND	141
...
084	AUTO	150
085	AUTO2	149
086	AUTO3	148
...
114	CH1	153
115	CH2	152
116	CH3	---
117	CH4	151
...
231	PMEN48	---
232	PMEN49	---
233	PMEN50	---

PGM2 MODE PROGRAMMING**1. CAT SETTINGS:**

Entering the PGM2 mode may be achieved from the REG mode as follows:

- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 13 CAT SETTING
- 4) Select 2 CAT2
- 5) Set the following values;

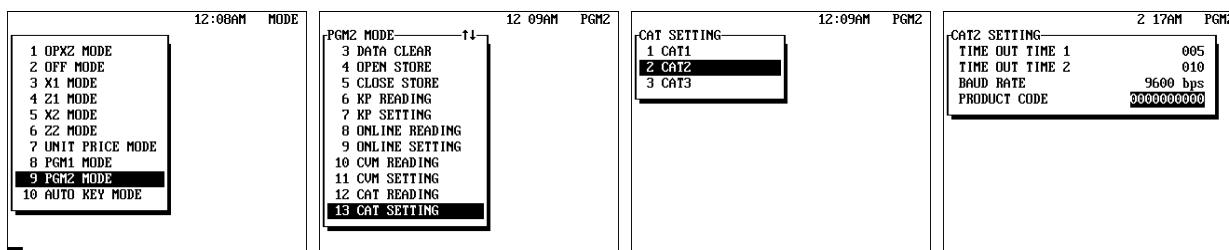
TIMEOUT TIME1 = 005

TIMEOUT TIME2 = 010

BAUD RATE = 9600 bps

PRODUCT CODE = 0000000000

- 6) Depress the [CA/AT] key when all settings are completed to exit to the CAT SETTING Sub-Menu.
- 7) Depress the [CANCEL] key to exit to the PGM2 Sub-Menu.



PROGRAMMING MEDIA KEYS

There are 3 different functions used in the Debitek Cash Card implementation. The functions are 1) Debit, 2) Partial Debit and 3) Eject. The specific Charge Media key is significant to the interface and should be preset exactly as indicated on the following pages.

IMPORTANT: *Only the specified Charge media keys may be used for the Cash Card interface !!!*

1. Debit Finalization Key:

Entering the PGM2 mode may be achieved from the REG mode as follows:

- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 2 SETTING
- 4) Select 5 MEDIA
- 5) Select 3 CHARGE
- 6) Select 1 CHARGE1
- 7) Set the following related CH1 Media key's presets;

CH1 Media Key Related - Parameter Field Setting	Preset	Recommended Setting
Text (Gross)	CHARGE1	DEBIT
Text (Refund)	CHARGE1-	DEBIT-
Short Tender	Enable/Disable	Disable
CAT Operation	NON-COMPULSORY	CAT2 COMPULSORY
CAT2 Action Code	CHG-SALE	CHG-SALE
CAT2 Trans. Type	CH1	CH1
Card# Prt	Yes/No	No
SignLine Prt.	Yes/No	No
Card Holder Prt.	Yes/No	No
Expiration Prt.	Yes/No	No
Number of Rcpt	1-9	1
Change Due	Enable/Disable	Disable
Drawer Opening	Yes/No	No
Amount Entry	Inhibit/Compulsory	Inhibit

- 8) Depress [CA/AT] when all settings are completed to exit to the PGM2 Charge Sub-Menu.
- 9) Depress [CANCEL] to exit the Charge Sub-Menu and return to the Media preset menu.

12:08AM MODE 1 OPX2 MODE 2 OFF MODE 3 X1 MODE 4 21 MODE 5 X2 MODE 6 22 MODE 7 UNIT PRICE MODE 8 PGM1 MODE 9 PGM2 MODE 10 AUTO KEY MODE	2 17AM PGM2 1 READING 2 SETTING 3 DATA CLEAR 4 OPEN STORE 5 CLOSE STORE 6 KP READING 7 KP SETTING 8 ONLINE READING 9 ONLINE SETTING 10 CUM READING 11 CUM SETTING	2 18AM PGM2 SETTING 1 ARTICLE 2 DIRECT KEY 3 PLU MENU KEY 4 FUNCTION 5 MEDIA 6 TEXT 7 PERSONNEL 8 TERMINAL 9 DATE/TIME 10 OPTIONAL 11 SECRET CODE	2 18AM PGM2 MEDIA 1 CASH 2 CHECK 3 CHARGE 4 EMPL CHARGE 5 CONVERSION 6 EAT-IN 7 SERVICE 8 FINAL 9 CID 10 CH/CG 11 CA/CK
1 CHARGE 2 CHARGE2 3 CHARGE3 4 CHARGE4 5 CHARGES 6 CHARGE6 7 CHARGE7 8 CHARGE8	2 18AM PGM2 CHARGE1 TEXT(GROSS) DEBIT TEXT(REFUND) DEBIT- HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NON-COMPULSORY CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1	2 19AM PGM2 CHARGE1 TEXT(GROSS) DEBIT TEXT(REFUND) DEBIT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1	2 19AM PGM2 CHARGE1 TEXT(GROSS) DEBIT TEXT(REFUND) DEBIT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1
2 20AM PGM2 CHARGE1 TEXT(GROSS) DEBIT TEXT(REFUND) DEBIT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CAT2 COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1	2 21AM PGM2 CHARGE1 TEXT(GROSS) DEBIT TEXT(REFUND) DEBIT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CAT2 COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1	2 21AM PGM2 CHARGE1 CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH1 CAT3 ACTION CODE CHG-SELL CAT3 TRANS. TYPE CH1 CARD# PRT. NO CARD# FORMAT PARTIAL SIGN LINE PRT. NO CARD HOLDER PRT. NO EXPIRATION PRT. NO NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE	3:00AM PGM2 CHARGE1 CARD# PRT. NO CARD# FORMAT PARTIAL SIGN LINE PRT. NO CARD HOLDER PRT. NO EXPIRATION PRT. NO NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE
3:00AM PGM2 CHARGE1 NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING NO	4:13AM PGM2 CHARGE1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING NO AMOUNT ENTRY INHIBIT		

2. Partial Debit Finalization Key:

Entering the PGM2 mode may be achieved from the REG mode as follows;

- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 2 SETTING
- 4) Select 5 MEDIA
- 5) Select 3 CHARGE
- 6) Select 2 CHARGE2
- 7) Set the following related CH2 Media key's presets:

CH2 Media Key Related - Parameter Field Setting	Preset	Recommended Setting
Text (Gross)	CHARGE2	PARTIAL
Text (Refund)	CHARGE2-	PARTIAL-
Short Tender	Enable/Disable	Enable
CAT Operation	NON-COMPULSORY	CAT2 COMPULSORY
CAT2 Action Code	CHG-SALE	CHG-SALE
CAT2 Trans. Type	CH2	CH2
Card# Prt	Yes/No	No
Sign.Line Prt.	Yes/No	No
Card Holder Prt.	Yes/No	No
Expiration Prt.	Yes/No	No
Number of Rcpt	1-9	1
Change Due	Enable/Disable	Disable
Drawer Opening	Yes/No	No
Amount Entry	Inhibit/Compulsory	Compulsory

- 8) Depress [CA/AT] when all settings are completed to exit to the PGM2 Charge Sub-Menu.
- 9) Depress [CANCEL] to exit the Charge Sub-Menu and return to the Media preset menu.

12:08AM MODE 1 OPX2 MODE 2 OFF MODE 3 X1 MODE 4 21 MODE 5 X2 MODE 6 22 MODE 7 UNIT PRICE MODE 8 PGM1 MODE 9 PGM2 MODE 10 AUTO KEY MODE	2 17AM PGM2 1 READING 2 SETTING 3 DATA CLEAR 4 OPEN STORE 5 CLOSE STORE 6 KP READING 7 KP SETTING 8 ONLINE READING 9 ONLINE SETTING 10 CUM READING 11 CUM SETTING	2 18AM PGM2 1 ARTICLE 2 DIRECT KEY 3 PLU MENU KEY 4 FUNCTION 5 MEDIA 6 TEXT 7 PERSONNEL 8 TERMINAL 9 DATE/TIME 10 OPTIONAL 11 SECRET CODE	2 18AM PGM2 1 MEDIA 2 CHECK 3 CHARGE 4 EMPL CHARGE 5 CONVERSION 6 EAT-IN 7 SERVICE 8 FINAL 9 CID 10 CH/CG 11 CA/CK
①	②	③	④
2:22AM PGM2 1 CHARGE 2 CHARGE1 3 CHARGE2 4 CHARGE4 5 CHARGES 6 CHARGE6 7 CHARGE7 8 CHARGE8	2:23AM PGM2 1 CHARGE2 TEXT(GROSS) PARTIAL TEXT(REFUND) PARTIAL HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NON-COMPULSORY CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2	2:23AM PGM2 1 CHARGE2 TEXT(GROSS) PARTIAL TEXT(REFUND) PARTIAL HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NON-COMPULSORY CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2	2:24AM PGM2 1 CHARGE2 TEXT(GROSS) PARTIAL TEXT(REFUND) PARTIAL HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NON-COMPULSORY CAT OPERATION CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2
⑤	⑥	⑦	⑧
2:24AM PGM2 1 CHARGE2 TEXT(GROSS) PARTIAL TEXT(REFUND) PARTIAL HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CAT2 COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2	2:24AM PGM2 1 CHARGE2 TEXT(GROSS) PARTIAL TEXT(REFUND) PARTIAL HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL CAT2 COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2	2:25AM PGM2 1 CHARGE2 CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH2 CAT3 ACTION CODE CHG-SELL CAT3 TRANS. TYPE CH2 CARD# PRT. NO CARD# FORMAT PARTIAL SIGN LINE PRT. NO CARD HOLDER PRT. NO EXPIRATION PRT. NO NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE ENABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING AMOUNT ENTRY COMPULSORY	4 15AM PGM2 1 CHARGE2 CARD# PRT. NO CARD# FORMAT PARTIAL SIGN LINE PRT. NO CARD HOLDER PRT. NO EXPIRATION PRT. NO NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE
⑨	①②	①②	①②
4 15AM PGM2 1 CHARGE2 NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING NO	3:02AM PGM2 1 CHARGE2 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE ENABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING YES AMOUNT ENTRY COMPULSORY		
①③	①④		

3. Card Ejection Key:

Entering the PGM2 mode may be achieved from the REG mode as follows;

- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 2 SETTING
- 4) Select 5 MEDIA
- 5) Select 3 CHARGE
- 6) Select 4 CHARGE4
- 7) Set the following related CH4 Media key's presets:

CH2 Media Key Related - Parameter Field Setting	Preset	Recommended Setting
Text (Gross)	CHARGE4	EJECT
Text (Refund)	CHARGE4-	EJECT-
Short Tender	Enable/Disable	Disable
CAT Operation	NON-COMPULSORY	CAT2 COMPULSORY
CAT2 Action Code	CHG-SALE	CHG-SALE
CAT2 Trans. Type	CH4	CH4
Card# Prt	Yes/No	No
Sign.Line Prt.	Yes/No	No
Card Holder Prt.	Yes/No	No
Expiration Prt.	Yes/No	No
Number of Rcpt	1-9	1
Change Due	Enable/Disable	Disable
Drawer Opening	Yes/No	No
Amount Entry	Inhibit/Compulsory	Inhibit

- 8) Depress [CA/AT] when all settings are completed to exit to the PGM2 Charge Sub-Menu.
- 9) Depress [CANCEL] to exit the Charge Sub-Menu and return to the Media preset menu.

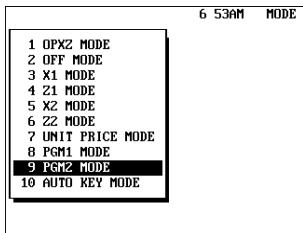
<p>12:08AM MODE</p> <p>1 OPX2 MODE 2 OFF MODE 3 X1 MODE 4 X2 MODE 5 X2 MODE 6 22 MODE 7 UNIT PRICE MODE 8 PGM1 MODE 9 PGM2 MODE 10 AUTO KEY MODE</p>	<p>2 17AM PGM2</p> <p>1 READING 2 SETTING 3 DATA CLEAR 4 OPEN STORE 5 CLOSE STORE 6 KP READING 7 KP SETTING 8 ONLINE READING 9 ONLINE SETTING 10 CUM READING 11 CUM SETTING</p>	<p>2 18AM PGM2</p> <p>1 ARTICLE 2 DIRECT KEY 3 PLU MENU KEY 4 FUNCTION 5 MEDIA 6 TEXT 7 PERSONNEL 8 TERMINAL 9 DATE/TIME 10 OPTIONAL 11 SECRET CODE</p>	<p>2 18AM PGM2</p> <p>1 MEDIA 2 CHECK 3 CHARGE 4 EMPL CHARGE 5 CONVERSION 6 EAT-IN 7 SERVICE 8 FINAL 9 CID 10 CH/CG 11 CA/CK</p>
①	②	③	④
<p>9:18AM PGM2</p> <p>1 CHARGE1 2 CHARGE2 3 CHARGE3 4 CHARGE4 5 CHARGES 6 CHARGE6 7 CHARGE7 8 CHARGE8</p>	<p>2:27AM PGM2</p> <p>1 CHARGE4 TEXT(GROSS) EJECT TEXT(REFUND) EJECT- HALO 18 GLU/PBLU ENABLE SHORT TENDER ENABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION NON-COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4</p>	<p>2:27AM PGM2</p> <p>1 CHARGE4 TEXT(GROSS) EJECT TEXT(REFUND) EJECT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION NON-COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4</p>	<p>2:27AM PGM2</p> <p>1 CHARGE4 TEXT(GROSS) EJECT TEXT(REFUND) EJECT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CATZ COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4</p>
⑤	⑥	⑦	⑧
<p>2:28AM PGM2</p> <p>1 CHARGE4 TEXT(GROSS) EJECT TEXT(REFUND) EJECT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CATZ COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4</p>	<p>2:28AM PGM2</p> <p>1 CHARGE4 TEXT(GROSS) EJECT TEXT(REFUND) EJECT- HALO 18 GLU/PBLU ENABLE SHORT TENDER DISABLE HEADER ON BILL NO FOOTER ON BILL NO CAT OPERATION CATZ COMPULSORY CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4</p>	<p>2:30AM PGM2</p> <p>1 CHARGE4 CAT1 ACTION CODE NOT TRANSMIT CAT2 ACTION CODE CHG-SELL CAT2 TRANS. TYPE CH4 CAT3 ACTION CODE CHG-SELL CAT3 TRANS. TYPE CH4 CARD# PRT. NO CARD# FORMAT PARTIAL SIGN LINE PRT. NO CARD HOLDER PRT. NO EXPIRATION PRT. NO NUMBER OF RCPT 1</p>	<p>4:16AM PGM2</p> <p>1 CHARGE4 NUMBER OF RCPT 1 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING NO AMOUNT ENTRY INHIBIT</p>
⑨	⑩⑪	⑫⑬	⑭⑮
<p>4 16AM PGM2</p> <p>1 CHARGE4 CLOSED GC FILE NO RETAINED BILL PRINT NON-COMPULSORY FOOTER ON RCPT NO NON-ADD # ENTRY NON-COMPULSORY CHANGE DUE DISABLE TAXABLE1 DELETE NO TAXABLE2 DELETE NO TAXABLE3 DELETE NO TAXABLE4 DELETE NO DRAWER OPENING NO AMOUNT ENTRY INHIBIT</p>			
⑯⑰			

MEDIA KEY PROGRAMMING READOUT**1. Key Sequence:**

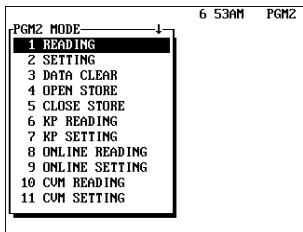
To obtain the media key preset reading, please follow the below key sequence:

Entering the PGM2 mode may be achieved from the REG mode as follows:

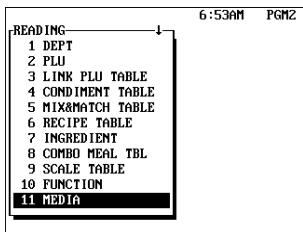
- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 1 READING
- 4) Select 11 MEDIA
- 5) Select 2 REPORT PRINTER
- 6) Once the report is printed, verify your settings.



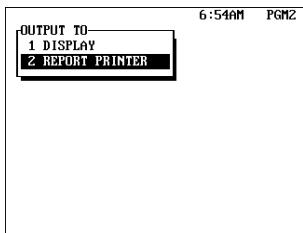
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1 0 / 0 1 / 2 0 0 1	000001
#0137	7:45PM
* P G M 2 *	
M E D I A	
CASH	KP0000 L18
	00000000000000
CA1	CA1 0000000001
	KP0000 L18
	00000000000000
CA2	CA2 0000000001
	KP0000 L18
	00000000000000
CK1	CK1 0000000001
	:
	:
DEBIT	KP0000 L18
DEBIT-	010000001000010
CH1	CH1 2000101111
	KP0000 L18
PARTIAL	000000001000001
PARTIAL-	CH2 2000101111
	:
EJECT	KP0000 L18
EJECT-	010000001000010
CH4	CH4 2000101111
	:
	:
****CID	9999999.99
CHK/CG	999999.99

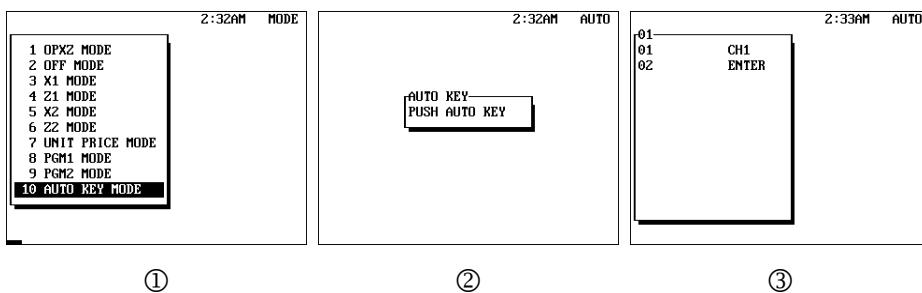
PROGRAMMING AUTO KEYS

Because the Cash Card is utilizing the credit card authorization interface, it is necessary to utilize the AUTO Sequence function keys to automatically depress the [ENTER] key when the "SWIPE CARD" prompt appears in the display.

1. AUTO key - Debit Finalization Key:

Entering PGM2 mode may be achieved from the REG mode as follows:

- 1) Depress the [MODE] key
- 2) Select 10 AUTO KEY MODE
- 3) Depress the [AUTO] key
- 4) Depress the [CH1] key
- 5) Depress the [ENTER] key
- 6) Depress the [AUTO] key
- 7) Depressing the [CANCEL] key will return the ER-A770 to the REG-mode



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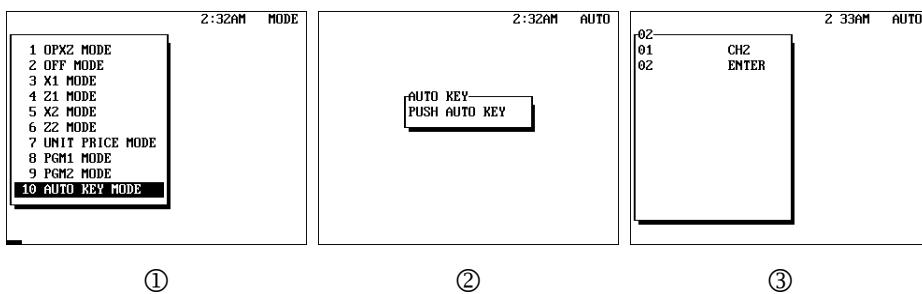
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2. AUTO key - Partial Debit Finalization Key:

Entering PGM2 mode may be achieved from the REG mode as follows:

- 1) Depress the [MODE] key
- 2) Select 10 AUTO KEY MODE
- 3) Depress the [AUTO2] key
- 4) Depress the [CH2] key
- 5) Depress the [ENTER] key
- 6) Depress the [AUTO2] key
- 7) Depressing the [CANCEL] key will return the ER-A770 to the REG-mode



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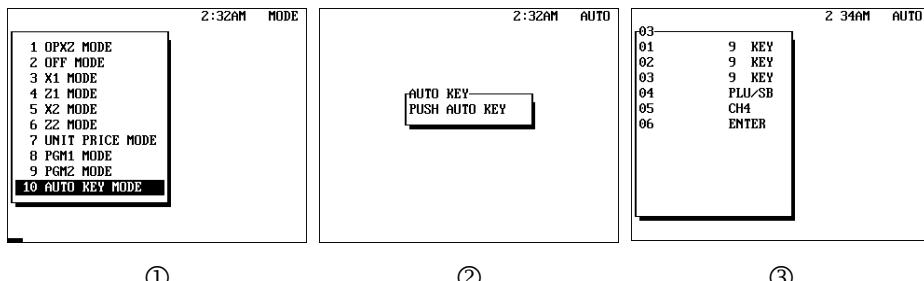
3. AUTO key - Eject Card Key:

Prior to creating this Auto key for ejecting the card, it is necessary to also create a zero-priced PLU which will become part of the Auto sequence entry to the Charge-4 media key.

In this case, it is assumed that the PLU code 999 has been previously set as a zero-priced PLU.

Entering the PGM2 mode may be achieved from the REG mode as follows:

- 1) Depress the [MODE] key
- 2) Select 10 AUTO KEY MODE
- 3) Depress the [AUTO3] key
- 4) Enter the PLU code "999"
- 5) Depress the [PLU/SB] key
- 6) Depress the [CH4] key
- 5) Depress the [ENTER] key
- 6) Depress the [AUTO3] key
- 7) Depressing the [CANCEL] key will return the ER-A770 to the REG-mode

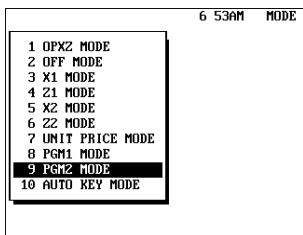


AUTO KEY PROGRAMMING READOUT**1. Key Sequence:**

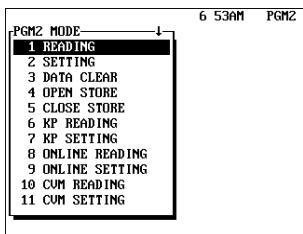
To obtain the Auto key preset reading, please follow the below key sequence:

Entering PGM2 mode may be achieved from the REG mode as follows:

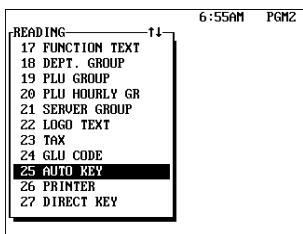
- 1) Depress the [MODE] key
- 2) Select 9 PGM2 MODE
- 3) Select 1 READING
- 4) Select 25 AUTO KEY
- 5) Select 2 REPORT PRINTER
- 6) Once the report is printed, verify your settings.



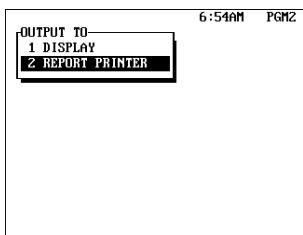
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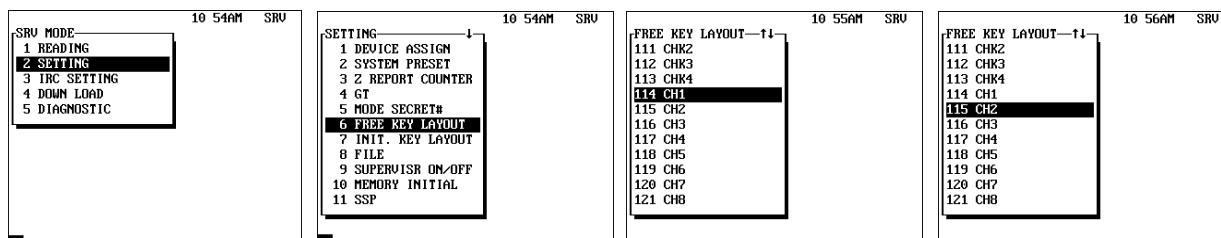
1 0 / 0 1 / 2 0 0 1	000001
#0138	7:52PM
* P G M 2 *	
A U T O K E Y	
# 0 1	CH1 ENTER
# 0 2	CH2 ENTER
# 0 3	9 KEY 9 KEY 9 KEY PLU/SB CH4 ENTER
⋮	⋮
⋮	⋮

FINAL STAGES

During SRV-mode programming the [CH1], [CH2] and [CH4] keys were placed directly onto the keyboard to be accessed during the Auto key presetting. Now that the Auto keys have been preset, it is recommended that the above mentioned function keys be removed from the keyboard assignment.

Place the ER-A770 into SRV mode:

- 1) Select 2. SETTING
- 2) Select 6. FREE KEY
- 3) Select 114. CH1
- 4) Depress the [/@/FOR] key to remove the [CH1] key.
- 5) Select 115. CH2
- 6) Depress the [/@/FOR] key to remove the [CH2] key.
- 7) Select 117. CH4
- 8) Depress the [/@/FOR] key to remove the [CH4] key.
- 9) Depress the [CA/AT] when all settings are completed to return to the SETTING Main-Menu.
- 10) Depress the [MODE] key to return the REG-mode.

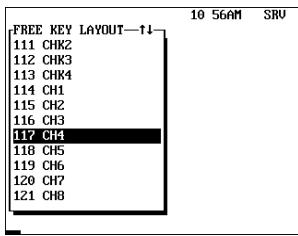


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Notes:

1. When selecting the [CH1], [CH2] and [CH4] function keys during SRV Job #950, use the [UP] and [DOWN] arrow keys.
2. When the [/@/FOR] key is depressed to remove the highlighted function key, the ER-A770 will automatically highlight the next function key.

QUICK SET UP

The following table will show the summarized quick set up procedure for the ER-A770. It is assumed that the Debitek Card Reader has been received with the correct ECR parameters loaded.

ECR Mode	No.	Action	Related Preset
Off	1	Install all Options (ROM/RAM, etc.)	
	2	Connect all Peripherals (i.e. Debitek, etc.)	
SRV	3	Master Reset <i>*** MRS-1 is described for this example</i>	MRS-1: AC Power to "OFF", place the RESET switch to the "ON" position, AC power to "ON", place the RESET switch to the "OFF" position while depressing [RECEIPT] feed key, enter the PASSWORD.
	4	Set Device Assign	2 SETTING, 1 DEVICE ASSIGN, 15 CAT#2, enter CH#. (0-7)
	5	Set System Presets	2 SETTING, 2 SYSTEM PRESETS, JOB#906 = 0xxx, JOB#916 = x4xx
	6	Set Free Key Layout	2 SETTING, 6 FREE KEY, FUNC#084, 085, 086, 114, 115 and 117
PGM2	7	Set CAT#2 presets	15 CAT SETTING, 2 CAT2, preset TIME OUT1 and TIME OUT2
	8	Set Media Key presets	2 SETTING, 5 MEDIA, 3 CHARGE, 1 CHARGE1, 2 CHARGE2 and 4 CHARGE4
	9	Set Auto Key presets	Auto = CH1, ENTER Auto2 = CH2, ENTER Auto3 = 999, PLU/SB, CH4, ENTER
SRV	10	Remove unwanted function keys - Free Key	2 SETTING, 6 FREE KEY, FUNC#114, 115 and 117



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